

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-28, 30, and 31 as follows.

1-28. (Canceled).

29. (Previously Presented). A method for fabricating a BST parallel plate capacitor comprising:

forming a platinum bottom electrode supported by a substrate, including forming a lateral shape of the platinum bottom electrode;

forming a BST thin film dielectric region over the platinum bottom electrode, including producing BST material over the platinum bottom electrode only after the lateral shape of the platinum bottom electrode is formed;

forming a top electrode over the BST thin film dielectric region, including producing top electrode material over the BST material and either immediately after the BST material is produced or immediately after the lateral shape of the BST thin film dielectric region is formed; and

annealing the BST thin film dielectric region only after forming a passivation structure.

30. (Canceled).

31. (Canceled).

32. (Previously presented). The method of claim 29 wherein the step of forming a platinum bottom electrode supported by a substrate comprises:

forming a lift off mask over the substrate, the lift off mask defining the lateral shape of the bottom electrode;

depositing a layer of bottom electrode material over the lift off mask; and

removing the lift off mask, thereby forming the lateral shape of the bottom electrode.

33. (Previously presented). The method of claim 32 wherein:

the step of forming a lift off mask over the substrate comprises depositing a photoresist lift off mask over the substrate; and

the step of depositing a layer of bottom electrode material over the lift off mask comprises depositing a platinum layer over the photoresist lift off mask.

34. (Previously presented). The method of claim 29 wherein the step of forming a platinum bottom electrode supported by a substrate comprises:

forming a layer of bottom electrode material over the substrate; and

removing selected lateral portions of the bottom electrode material, thereby forming the lateral shape of the bottom electrode.

35. (Previously presented). The method of claim 34 wherein:

the step of forming a layer of bottom electrode material over the substrate comprises depositing a platinum layer over the substrate; and

the step of removing selected lateral portions of the bottom electrode material comprises etching away selected lateral portions of the platinum layer.

36. (Previously presented). The method of claim 29 further comprising:

forming a titanium adhesion layer located between the substrate and the platinum bottom electrode.